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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,961	07/16/2003	Daniel Gloaguen	W1029.39-US-01	9705
24113	7590	04/21/2004	EXAMINER	
PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A.			LEON, EDWIN A	
4800 IDS CENTER			ART UNIT	
80 SOUTH 8TH STREET			PAPER NUMBER	
MINNEAPOLIS, MN 55402-2100			2833	

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/620,961

Applicant(s)

GLOAGUEN ET AL.

Examiner

Edwin A. León

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 072003.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

Claim 3 recites the limitation "a layer of silver or tin" in Line 2. It is not clear if this layer is the same as the layer mentioned in Claim 1 or if it is a different layer. For examination purposes, the Examiner will assume that the layers are the same since Applicant's drawings only show one layer. Correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts (U.S. Patent No. 2,410,321) in view of Hamilton et al. (U.S. Patent No.

4,315,175). With regard to Claims 1, 4-5, 8 and 10, Watts discloses a method for improving an electric link between a contact (15) and a cable (shown in Fig. 2) comprising strands (shown in Fig. 2), the strands (shown in Fig. 2) of the cable (shown in Fig. 2) being designed to cooperate with a wall (internal surface of 15) of the contact (15), wherein an intermediate layer (13b) is pressed against this wall (internal surface of 15) to make the strands (shown in Fig. 2) cooperate with this layer (13b), a pressing means (12, 16) is used, this means (12, 16) comprising a die (16) and a punch (12), and wherein the die (16) is placed around the contact (15), the punch (12) being designed to drive the layer (13b) into a cavity (shown in Fig. 4) against the wall (internal surface of 15), and the die (16) is removed from the contact (15) in sectioning the outer rim (13a) of the layer (13b) so as to form a collar (13a) at an aperture (shown in Fig. 3) of the cavity (shown in Fig. 4) and an external wall (wall in which 13a is located, Fig. 3) of the contact (15) against which the strands (shown in Fig. 2) are placed and with which they cooperate is covered by the layer (13b). See Figs. 1-4.

However, Watts doesn't show the layer as being a metal layer.

Hamilton et al. discloses a similar connector using a metal layer (14) to make the strands (58) of a cable (68) cooperate with a contact (12). See Figs. 1-9.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the method of Watts by using a metal layer as taught in Hamilton et al. in order to provide a more reliable connection between the cable and the contact.

With regard to Claim 6, Watts discloses a punch (12) made of hardened steel is chosen. See Figs. 1-4.

With regard to Claim 7, Watts discloses the barrel (12) having a hole (shown in Fig. 4) to discharge the air contained in the cavity (shown in Fig. 4) during the penetration by the punch (12). See Figs. 1-4.

With regard to Claim 9, the combination of Watts and Hamilton et al. discloses the claimed invention except for metal layer been 0.1 millimeter thick.

Still, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the metal layer 0.1 millimeter thick, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617, F. 2d 272, 205 USPQ 215 (CCPA 1980).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watts (U.S. Patent No. 2,410,321) in view of Hamilton et al. (U.S. Patent No. 4,315,175) and Applicant's admitted prior art. The combination of Watts and Hamilton et al. discloses the claimed invention as shown above except for the coefficients of expansion of the strands of the cable and of the contact being different.

Applicant's admitted prior art discloses that is well known in the art that the coefficients of expansion of the strands of the cable and of the contact are different. See Page 1, Lines 27-30.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the connector of Watts and Hamilton et al. by having the coefficients of expansion of the strands of the cable and of the contact being

different as taught in Applicant's admitted prior art in order to improve the reliability of the connector.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watts (U.S. Patent No. 2,410,321) in view of Hamilton et al. (U.S. Patent No. 4,315,175) and Dieterich (U.S. Patent No. 3,733,573). The combination of Watts and Hamilton et al. discloses the claimed invention as shown above except for the layer being of silver or tin.

Dieterich discloses a similar connector using a metal layer of silver. See Column 10, Lines 59-61.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the connector of Watts and Hamilton et al. by making the layer of silver as taught in Dieterich in order to provide better support for the strands when the connector is completed and the strands are placed and crimped inside the contact.

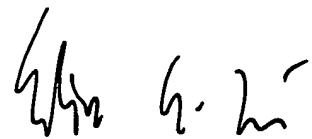
Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Melver (U.S. Patent No. 3,626,363), Grabbe (U.S. Patent No. 4,637,135), Redwine (U.S. Patent No. 3,146,519), Noble (U.S. Patent No. 6,442,832) and Shaffer (U.S. Patent No. 4,976,132) disclose methods of connecting a contact to a cable by using dies.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (571) 272-2008. The examiner can normally be reached on Monday - Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800, extension 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edwin A. León
AU 2833

EAL
April 17, 2004